^{180}Os $Z = 76$ $N = 104$ link to full NNDC output

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1437.736 (0.016) MeV
Qbeta+ = 1.480 (0.027) MeV

	Energy	T	J+		J-		J-other			T1/2	
S-alpha=	-3.859 (0.032)										
180OS 1	0.000		0+						1	21.5 M	4
180OS 2	0.132		2+						2	0.67 NS	7
180OS 3	0.409		4+						3	27.0 PS	35
180OS 4	0.736		0+						4		
180OS 5	0.795		6+						5	6.7 PS	17
180OS 6	0.831		2+						6		
180OS 7	0.870		2+						7		
180OS 8	1.023		3+						8		
180OS 9	1.053		4+						9		
180OS 10	1.197		4+						10		
180OS 11	1.257		8+						11	6.9 PS	14
180OS 12					1.375	3-			12		
180OS 13	1.379		6+						13		
180OS 14	1.406		5+						14		
180OS 15					1.515	4-			15		
180OS 16	1.516		4+						16		
180OS 17					1.604	5-			17		
180OS 18	1.627		6+						18		
180OS 19					1.761	6-			19		
180OS 20	1.768		10+						20		
180OS 21					1.863	7-			21	0.21 NS	LT
180OS 22	1.877		6+						22		
180OS 23	1.881		7+						23		
180OS 24					1.929	7-			24	15.2 NS	12
180OS 25					1.987	8-			25		
180OS 26					2.086	8-			26		
180OS 27					2.113	9-			27		
180OS 28					2.176	9-			28		
180OS 29					2.276	10-			29		
180OS 30							2.286	(7-,8-)	30		
180OS 31	2.309		12+						31		
180OS 32	2.411		9+						32		
180OS 33							2.429		33		
180OS 34					2.463	10-			34		
180OS 35					2.467	11-			35		
180OS 36					2.544	11-			36		

1800S	37					2.599		37	
1800S	38					2.636		38	
1800S	39					2.675	(9-,10-)	39	
1800S	40			2.683	12-			40	
1800S	41	2.695	12+					41	
1800S	42	2.875	14+					42	
1800S	43					2.915		43	
1800S	44			2.919	13-			44	
1800S	45			2.920	12-			45	
1800S	46					2.925		46	
1800S	47			2.982	13-			47	
1800S	48	3.008	14+					48	
1800S	49					3.139	(11-,12-)	49	
1800S	50			3.176	14-			50	
1800S	51					3.246		51	
1800S	52					3.343		52	
1800S	53	3.403	16+					53	
1800S	54			3.443	15-			54	
1800S	55			3.452	14-			55	
1800S	56			3.476	15-			56	
1800S	57	3.495	16+					57	
1800S	58					3.629		58	
1800S	59					3.657	(13-,14-)	59	
1800S	60					3.704	(11,12)	60	5 NS LE
1800S	61			3.735	16-			61	
1800S	62					3.856	(12,13)	62	
1800S	63					3.886		63	
1800S	64	3.926	18+					64	
1800S	65			3.982	17-			65	
1800S	66			4.028	16-			66	
1800S	67			4.031	17-			67	
1800S	68					4.037	(13,14)	68	
1800S	69					4.068		69	
1800S	70	4.135	18+					70	
1800S	71					4.201	(15-,16-)	71	
1800S	72					4.248	(14,15)	72	
1800S	73			4.342	18-			73	
1800S	74					4.487	(15,16)	74	
1800S	75			4.497	19-			75	
1800S	76					4.532		76	
1800S	77	4.543	20+					77	
1800S	78					4.581		78	
1800S	79			4.600	18-			79	
1800S	80			4.651	19-			80	
1800S	81					4.751	(16,17)	81	

```
180OS  82 |                 |                 |   4.770     (17-,18-)       82
180OS  83 |  4.821     20+  |                 |                             83
180OS  84 |                 |   4.978     20- |                             84
180OS  85 |                 |                 |   5.037     (17,18)         85
180OS  86 |                 |   5.045     21- |                             86
S-p    =   5.062 ( 0.030)-------------------------------------------------------------------
180OS  87 |                 |                 |   5.136                     87
180OS  88 |                 |                 |   5.165     (20-)           88
180OS  89 |  5.236     22+  |                 |                             89
180OS  90 |                 |                 |   5.255                     90
-----------                                                                  -----------------
180OS  91 |                 |   5.294     21- |                             91
180OS  92 |                 |                 |   5.348     (18,19)         92
180OS  93 |                 |                 |   5.387     (19-,20-)       93
180OS  94 |  5.551     22+  |                 |                             94
180OS  95 |                 |                 |   5.562                     95
180OS  96 |                 |   5.626     22- |                             96
180OS  97 |                 |   5.667     23- |                             97
180OS  98 |                 |                 |   5.732                     98
180OS  99 |                 |                 |   5.788     (22-)           99
180OS 100 |                 |   5.951     23- |                            100
-----------                                                                  -----------------
180OS 101 |  5.981     24+  |                 |                            101
180OS 102 |                 |                 |   6.025                    102
180OS 103 |                 |                 |   6.056     (21-,22-)      103
180OS 104 |                 |                 |   6.298     (24-)          104
180OS 105 |                 |                 |   6.324     (24+)          105
180OS 106 |                 |                 |   6.373                    106
180OS 107 |                 |   6.378     25- |                            107
180OS 108 |                 |                 |   6.496     (24-)          108
180OS 109 |                 |                 |   6.653     (25-)          109
180OS 110 |  6.766     26+  |                 |                            110
-----------                                                                  -----------------
180OS 111 |                 |                 |   6.773     (23-,24-)      111
180OS 112 |                 |                 |   6.824                    112
180OS 113 |                 |                 |   7.031     (26-)          113
180OS 114 |                 |                 |   7.145     (26+)          114
180OS 115 |                 |                 |   7.180     (27-)          115
180OS 116 |                 |                 |   7.290     (26-)          116
180OS 117 |                 |                 |   7.431     (27-)          117
180OS 118 |                 |                 |   7.535     (25-,26-)      118
180OS 119 |                 |                 |   7.615     (28+)          119
180OS 120 |                 |                 |   7.665                    120
-----------                                                                  -----------------
180OS 121 |                 |                 |   7.843     (28-)          121
180OS 122 |                 |                 |   8.015     (28+)          122
180OS 123 |                 |                 |   8.064     (29-)          123
180OS 124 |                 |                 |   8.303     (29-)          124
180OS 125 |                 |                 |   8.349     (27-,28-)      125
S-2p   =   8.529 ( 0.022)-------------------------------------------------------------------
```

```
180OS 126 |                |                |   8.554     (30+)          126
180OS 127 |                |                |   8.573                    127
180OS 128 |                |                |   8.740     (30-)          128
180OS 129 |                |                |   8.918     (30+)          129
180OS 130 |                |                |   9.022     (31-)          130
----------                                                                 -----------------
180OS 131 |                |                |   9.220     (29-,30-)      131
180OS 132 |                |                |   9.277     (31-)          132
S-n    =   9.410 ( 0.023)-------------------------------------------------------------------------
180OS 133 |                |                |   9.595     (32+)          133
180OS 134 |                |                |   9.717     (32-)          134
180OS 135 |                |                |   9.846     (32+)          135
180OS 136 |                |                |  10.050     (33-)          136
180OS 137 |                |                |  10.152     (31-,32-)      137
180OS 138 |                |                |  10.737     (34+)          138
180OS 139 |                |                |  11.147     (33-,34-)      139


S-p    =   5.062 ( 0.030)-------------------------------------------------------------------------
S-n    =   9.410 ( 0.023)-------------------------------------------------------------------------
S-2p   =   8.529 ( 0.022)-------------------------------------------------------------------------
S-2n   =  16.956 ( 0.021)-------------------------------------------------------------------------
S-alpha=  -3.859 ( 0.032)-------------------------------------------------------------------------

S+p       =  -2.394 ( 0.017)
S+n       =  -7.264 ( 0.030)
S+2p      =  -6.389 ( 0.021)
S+2n      = -16.394 ( 0.027)
S+alpha   =   4.599 ( 0.023)

gap p     =   2.668 ( 0.034)
gap n     =   2.146 ( 0.038)
gap 2p    =   2.140 ( 0.031)
gap 2n    =   0.562 ( 0.035)
gap alpha =   0.740 ( 0.040)
```